

Amendments to the claims

Please amend claims 1 and 6 and add new claims 29-32 as follows. This listing of claims will replace all prior versions, and listings of claims in the application.

1. (currently amended) A drug delivery molecule comprising:  
a polymerized carboxylic acid molecular scaffold having a plurality of pendant free carboxylic acid groups;  
a plurality of biologically active molecular modules, wherein each module is being covalently linked to a pendant carboxylic acid of the same polymerized carboxylic acid molecular scaffold, wherein said active modules comprise: at least one targeting module for promoting cellular uptake by a target cell; and at least one pro-drug module for altering cellular metabolism of the target cell; wherein the targeting or the pro-drug ~~at least one~~ active module comprises a polypeptide and/or polynucleotide; and  
wherein the scaffold comprises is a polymalic acid or a polymalate derivative ~~homopolymer~~.
2. (original) The drug delivery molecule according to claim 1, wherein the pro-drug is selected to inhibit expression of tumor-specific proteins.
3. (original) The drug delivery molecule according to claim 1, wherein the polymerized carboxylic acid molecular scaffold is poly( $\beta$ -L-malic acid).
4. (previously presented) The drug delivery molecule according to claim 3, wherein the poly( $\beta$ -L-malic acid) has a weight-averaged molecular weight (Mw) between 2,500 and 100,000.
5. (previously presented) The drug delivery molecule according to claim 4, wherein the poly( $\beta$ -L-malic acid) has a weight-averaged molecular weight (Mw) of at least about 5,000.
6. (currently amended) The drug delivery molecule according to claim 1, wherein each molecule of the polymerized carboxylic acid molecular scaffold has at least about 50 pendant ~~free~~ carboxylic acid groups.

7. (original) The drug delivery molecule according to claim 1, wherein the plurality of molecular modules further includes a molecular module for promoting disruption of biomembranes.

8. (original) The drug delivery molecule according to claim 7, wherein said molecular module for promoting disruption of biomembranes comprises a molecule having lipophilic characteristics and groups that are charged at physiologic pH and become uncharged at lysosomal pH thereby increasing lipophilicity of said molecular module.

9. (original) The drug delivery molecule according to claim 1, wherein the plurality of active molecular modules further includes a molecular module for prolonging circulation of the drug delivery molecule.

10. (original) The drug delivery molecule according to claim 9, wherein the molecular module for prolonging circulation of the drug delivery molecule comprises polyethylene glycol.

11. (original) The drug delivery molecule according to claim 1, wherein the plurality of active molecular modules further includes a reporter module for determining cellular uptake of the drug delivery molecule.

12. (original) The drug delivery molecule according to claim 11, wherein the reporter module comprises a fluorescent molecule.

13. (original) The drug delivery molecule according to claim 1, wherein the targeting molecule is selected to promote penetration of the blood brain barrier.

14-17. (canceled)

18. (original) The drug delivery molecule according to claim 1, wherein the pro-drug molecular module is linked to the polymerized carboxylic acid molecular scaffold by a cleavable

linkage that is cleaved when the drug delivery molecule enters a cell.

19. (original) The drug delivery molecule according to claim 18, wherein the cleavable linkage is a disulfide linkage.

20. (original) The drug delivery molecule according to claim 1, wherein the pro-drug molecular module comprises an antisense molecule.

21. (original) The drug delivery molecule according to claim 20, wherein the antisense molecule is a morpholino antisense molecule.

22. (original) The drug delivery molecule according to claim 20, wherein the antisense molecule interferes with production of laminin-8.

23. (original) The drug delivery molecule according to claim 22, wherein the antisense molecule interferes with production of laminin-8 by altering production of a laminin subunit selected from the group consisting of  $\alpha 4$  laminin and  $\beta 1$  laminin.

24-28. (canceled)

29. (new) The drug delivery molecule according to claim 18, wherein the pro-drug molecular module is cleaved from the molecular scaffold in cytoplasm.

30. (new) The drug delivery molecule according to claim 1, wherein the polymalate derivative comprises a derivatized malic acid lactone.

31. (new) A drug delivery molecule comprising:  
a polymerized polymalic acid molecular scaffold having a weight-averaged molecular weight (Mw) between 2,500 and 100,000; and  
a plurality of biologically active molecular modules comprising:  
at least one pro-drug morpholino antisense molecule that interferes with

production of laminin-8;

at least one targeting module that promotes penetration by the drug delivery molecule of the blood brain barrier; and

polyethylene glycol for prolonging the drug delivery molecule in circulation;

wherein the modules are covalently linked to the molecular scaffold.

32. (new) A drug delivery molecule comprising:

a poly( $\beta$ -L-malic acid) scaffold having a weight-averaged molecular weight (Mw) of at least 5,000; and

a plurality of biologically active molecular modules selected from the group of:

at least one pro-drug molecular module comprising a morpholino antisense molecule wherein the antisense molecule interferes with production of laminin-8 wherein the module is linked to the scaffold by a cleavable disulfide linkage;

at least one targeting module to promote penetration of the blood brain barrier,

at least one molecular module for promoting disruption of biomembranes having lipophilic characteristics and groups that are charged at physiological pH and uncharged at lysosomal pH thereby increasing lipophilicity of the module;

at least one molecular module for determining cellular uptake wherein the module comprises a fluorescent reporter molecule; and

at least one molecular module for prolonging circulation of the drug delivery molecule wherein the module comprises polyethylene glycol;

wherein the modules are covalently linked to the poly( $\beta$ -L-malic acid) scaffold.